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Geopolitics of Energy®

Geopolitics of Energy was founded by the late Melvin A. Conant of Washington, DC in 1979. Since 1993, it has been published under the auspices of the Canadian Energy Research Institute.

Inside Geopolitics of Energy

- **GasPEC Fears Unfounded: A Natural Gas Supply Cartel Equivalent to OPEC is Unlikely to Develop**
  by George Eynon

  The Gas Exporting Countries Forum (GECF) has been meeting regularly for the past six years to discuss and promote topics of mutual interest. In this paper, George Eynon discusses the prospects for the GECF to develop into a natural gas equivalent of OPEC. Mr. Eynon concludes that even if the GECF were to evolve into a more structured group, its ability to radically influence gas markets is going to be limited by the wide-ranging and sometimes conflicting positions, viewpoints and agendas of its own members.

- **The Future of IOCs**
  by Ged Davis

  By any measure the integrated oil companies, renamed the international oil companies (IOCs) following the first oil crisis, have had a remarkably successful 20th century. In this article, Ged Davis discusses the challenges facing the IOCs in the future, as well as their inherent strengths. In addition, Mr. Davis provides two likely, but highly divergent futures for the IOCs in the 21st century, based upon the degree of openess of the global system, and hence, the amount of opportunity afforded them.

- **The Effect of Oil Revenues on Transition Economies: The Case of Azerbaijan**
  by Michael Cohen

  The next five years will bring unprecedented oil revenues to Azerbaijan along with numerous challenges. In this paper, Michael Cohen discusses the government's initiatives to avoid Dutch Disease, and the potential affect of rising government oil revenues on political institutions, regime longevity, income inequality and the Nagorno-Karabakh conflict. Although Mr. Cohen concludes there are many reasons to believe Azerbaijan will join the ranks of Norway in terms of managing its oil wealth, he appears less optimistic about prospects for political reform in the country.

The Effect of Oil Revenues on Transition Economics: The Case of Azerbaijan

*by Michael Cohen**

The next five years will bring unprecedented oil revenues into Azerbaijan's economy. The country faces numerous challenges, mainly stemming from the combination of its central planning legacy and its re-emergence as a pivotal non-OPEC oil supplier. Even though the country has a long history of producing oil, it has little experience in managing its own petroleum wealth. Azerbaijan is struggling to overcome the economic collapse that followed independence from the former Soviet Union when the country's GDP contracted by almost 60 percent from 1990 to 1995. Almost 45 percent of the population still lies below the poverty line.[1]

Although the country's demographic has undergone a drastic transition since the fall of the Soviet Union, the leadership of the country has not. Freedom House characterizes Azerbaijan as an authoritarian regime that is mostly "not free".[2] Although the Production Sharing Agreement (PSA) has paved the way for Western-led FDI into the oil sector, Transparency International still ranks Azerbaijan as among the worst of 160 surveyed countries in terms of prevalence of corruption.[3]

This paper will first focus on the pathways in which Azerbaijan's oil revenues will flow to the state's budget in upcoming years. The economics literature has documented the debilitating effects oil revenues have had on countries' economies. African nations and some CIS countries have already fallen victim to various forms of Dutch Diesase.[4] The development economics literature has recently begun to assess the more intangible and indirect effects of oil revenues on institutions, leadership, regime longevity, political ideology, and income inequality. In addition to the fiscal effects of oil revenues on Azerbaijan's oil fund and budget, these indirect factors could help make Azerbaijan into a successful producer, or it could create economic disorder and hinder hopes for political reform. In the near-term these factors will affect Azerbaijan's treatment of the conflict in Nagorno-Karabakh, which has a destabilizing effect on the entire Caucasus region and will pose a security risk to oil infrastructure. The presence of excess oil revenues, combined with growing socioeconomic tensions, could induce the government to change its means for handling the conflict.

Oil Production in Azerbaijan: Background and Outlook

Azerbaijan's oil and natural gas production are expected to increase dramatically in the next five years. Oil from the Azeri-Chirag-Guneshli (ACG) deposit will fill the newly opened Baku-T'bilisi-Ceyhan (BTC) pipeline and provide much needed incremental oil supply to satisfy rising world oil demand. Although estimates range about the level of reserves that are left offshore in the Caspian Sea (anywhere from 7 to 40 billion barrels)[5], what is certain is Azerbaijan's geographic location and the presence of the BTC and South Caucasus Gas pipeline make it a primary transit state for oil and gas from the region.

Large inflows of energy sector investment, high oil prices, and oil production levels of around 400,000 barrels per day (bbl/d) increased real GDP by 26 percent in 2005 (see Figure 1). Although the entire fuel sector represented 27 percent of Azerbaijan's GDP in 2000, it grew to approximately 41 percent of GDP in 2005.[6] These growth rates are expected to continue, albeit on a smaller scale. According to the project operator of the ACG project, BP, Azerbaijan's oil export revenues stand to increase from 2.9 billion in 2006 to around 15-20 billion by 2010, depending on the price of oil.[7]

Dutch Disease: Economic Effects and Prevention Strategies

World crude oil prices are currently almost at their inflation adjusted peak of the early 1980s, and these levels are not expected to retreat by more than $10-15 until at least the end of 2007.[8] High prices will therefore coincide with increasing levels of crude oil exports from Azerbaijan and will be the critical determinant as to how much oil revenues it will actually receive by the time

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Figure 1: Indicators of Resource Dependence: Azerbaijan *in Million Nominal US Dollars unless otherwise indicated*							
	2002	2003	2004	2005	2006		2010
Oil Production /1	310	320	319	440	600		1,250
Net FDI	1,048	2,353	2,351	1,173	-157		476
Oil Sector Net FDI	984	2,315	2,258	1,091	-245		366
as share of total (%)	94%	98%	96%	93%	-		77%
Oil Sector Exports	2,046	2,250	3,097	4,989	7,931		17,857
as share of total (%)	89%	86%	83%	90%	93%		95%
Oil Sector Revenue	21.9	21.4	20.3	23.1	-		-
as share of total (%)	55%	56%	52%	54%	-		-
Oil Fund Assets	693	821	974	1,320	2,165		42,517

1. Thousand barrels per day
Oil Production source: US Energy Information Administration, Short Term Energy Outlook
Other Indicators from IMF, Country Report, No. 05/260, July 2005

output falls. The range of government receipts from ACG (Azeri-Chirag-Guneshli), BTC, and the Shah Deniz gas field are shown in Appendix 1. To help manage the expected volatility and magnitude of the revenue flows, the country established The State Oil Fund of the Azerbaijan Republic (SOFAZ) in 2001. Oil funds have two primary objectives according to John Wakemann-Linn of the IMF: stabilization (insulating monetary and fiscal policy), and savings for future generations. Azerbaijan's fund spending is subject to presidential control only, and therefore it denies the state budget access to easy oil money.[9] However, restrictions on presidential spending of the oil fund are not being effectively controlled. By 2005 more than four presidential decrees have called for spending from the oil fund. Three called for social spending to improve living conditions of refugees and displaced persons, and one requested money for financing SOCAR's share of BTC costs.[10]

Azerbaijan's oil fund functions more as a savings mechanism than as one to ensure stabilization.[11] This is partly because Azerbaijan's oil revenues will accrue so quickly. Kazakhstan's oil fund, in contrast, focuses more on stabilization, namely facilitating a better balance between monetary and fiscal policy. However, in comparison to other established oil funds (such as those in Norway), SOFAZ's resource expenditure guidelines are lax. Excessive spending can have inflationary effects. Although the spending guidelines are at the discretion of the president, the budget and asset management rules were approved by the Azerbaijani parliament in June 2003 as amendments to the Budget System Law.[12]

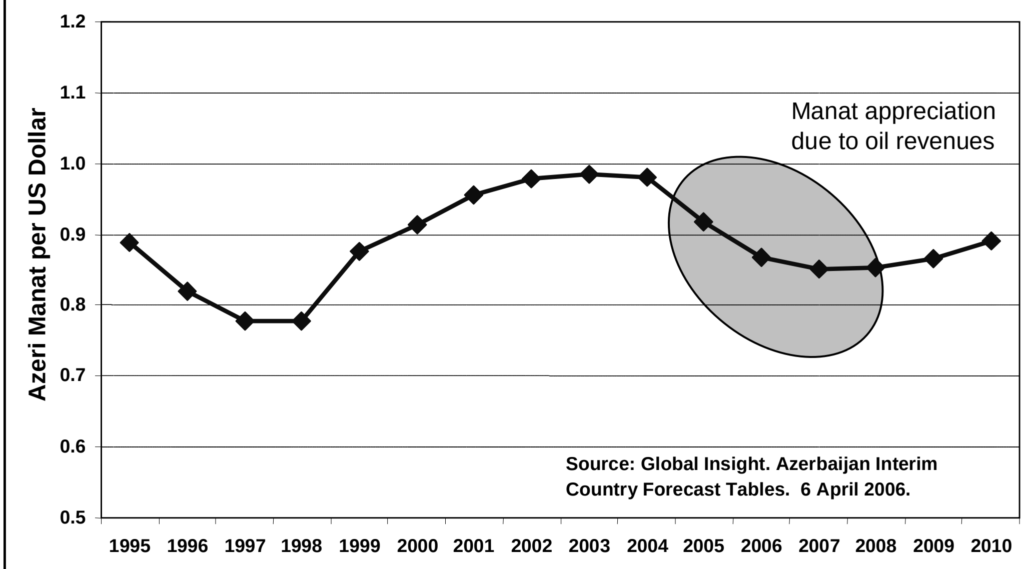
President Aliev's most recent strategy for long-term usage of the oil fund money was released on September 27, 2004. In the decree, the president outlined that when revenues reach their maximum levels, at least 25 percent will be saved. Expenditure limits will be projected based on constant real expenditure rates. The strategy for using revenues will aim to develop the non-oil sector, develop infrastructure, reduce poverty, provide for the return of internally displaced persons (IDPs) to their native lands, and increase and develop "human capital". In July 2005, the president announced he would increase spending on these problems. But, more worryingly, the strategy includes "consolidating the defense capabilities of the country". Lately, the political leadership has maintained that revenues from the energy sector will accumulate in SOFAZ and will later be used for domestic projects and the development of Azerbaijan's non-oil sector.[13]

Another primary goal of the oil fund will be to prevent volatility of the exchange rate by keeping assets in foreign denominations. As foreign inflows increase (from oil export revenues and energy sector investment), conversion into the local currency will increase. This is one of the causes of Dutch Disease. Theoretically, the natural resource-based industry will also be able to afford to pay higher wages and have higher interest rates than other export and import-competing industries, thereby making it difficult for the import-competing industries to remain competitive.

Among other consequences of high oil export dependency, Dutch Disease will tend to reduce the level of total exports or change the composition of exports away from high tech or manufacturing and service-based exports, which may be a better long-term contributor to GDP growth.[14]

In 2005, the Azerbaijani manat appreciated over six percent in nominal terms against the US dollar and in 2006, the manat has already appreciated an additional one percent (see Figure 2).[15] To counter the effects of this, in 2005 Azerbaijan temporarily exited a fixed exchange rate regime and pegged its exchange rate to the dollar, resulting in lower inflation. Higher oil export volumes will increase Azerbaijan's current account surplus. They will also have some associated positive effects on the non-oil sector because of favorable government policies that have encouraged investment in the tourist and non-hydrocarbon extractive industries. Still, according to the IMF, existing non-oil sector "capacity constraints" combined with high domestic demand will continue to increase inflationary pressures in 2006.[16]

Figure 2: Azerbaijani Exchange Rate (Against $US)



Regardless of the policy direction that Azerbaijan takes, the establishment of the oil fund and Azerbaijan's leadership in the Extractive Industries Transparency Initiative (EITI), which urges data transparency and hopes to reduce corruption, show positive signs that Azerbaijan is aware of the challenges it faces. In the IMF's executive board assessment of April 25, 2006, Azerbaijan was commended for its "impressive macroeconomic performance," given large capital inflows, and was assessed a rosy outlook for further economic growth. Positive spillover effects into the non-oil sector were also cited and were expected to continue as oil production increases; still, progress on structural reforms, most notably in the banking sector, is still needed. Managing the large external current accounts and budget surpluses that arise from oil revenues will be the main challenge.

Effects on Institutions

Oil revenues also affect the quality of institutions within a country, which has a direct effect on the country's economic growth. Isham et al. show that the concentration of exports in what they call "point source" natural resources (those extracted from a narrow geographic or economic base and not dependent on a number of independent actors) is significantly associated with weak public institutions and therefore slower GDP growth.[17] The authors develop four indices that measure the intensity of dependence for each of their four classifications of types of exports: (1) manufacturing (2) diffuse (e.g. cattle) (3) point source, and (4) coffee and cocoa. The third classification is shown below, and the variable is constructed by creating an indexed number that measures reliance on fuels, minerals, or plantation crops.

Figure 3 shows that the point source index has a negative and significant influence on all measures of institutional strength. The authors also show that non-manufactured or primary exports as a share of GDP have a positive effect on institutions because respect of the rule of law, property rights, etc. enables a country to become more connected to global markets. The authors further illustrate that even small improvements (downward) in the point-source index for a given country create substantial institutional improvements.[18] Therefore, even small decreases in point source export dependency, improve institutional strength.[19]

Figure 3: The Effect of Natural Resource Endowment on Institutions

	Rule of Law	Political Stability	Government Effectiveness	Absence of Corruption	Regulatory Framework	Property Rights & rule-based governance
Point Source Index	-1.48**	-2.09**	-1.47**	-0.95**	-1.09**	-1.22**
Share of Primary Exports/GDP	1.27*	1.46*	1.23*	0.15	0.89	1.77**

* Significant at 5% level, **Significant at 1% level.

Source: Isham, Joshua, Lant Pritchett, Michael Woolcock, and Gwen Busby. "The Varieties of Resource Experience: How Natural Resource Export Structures Affect the Political Economy of Economic Growth." Middlebury College. Table 4. Middlebury College Economics Discussion Paper No. 03-08R. June 2004.

The authors also show that the causality works in reverse. Not only are institutions a pre-determinant of successful resource management, but also resource dependency can reshape the institutional framework inside a country. Citing the paper, "the revenues a state collects, how it collects them, and the uses to which it puts them" also "define its nature". The authors' underlying point is that the types of natural resource endowments, in addition to their geography, determine what types of institutions "exist and persist" in a country. Natural resource abundance hurts incentives to engage in reform because autocracies are apt to continue to enjoy access to resource rents and squander them on subsidizing special interest groups that are favored by the incumbent government.[20]

In Azerbaijan, the economy is clearly centered around oil. A large part of the country's revenues will flow first into the oil fund's budget, and then some of it will flow into the primary budget. As oil revenues continue to increase, Azerbaijan's ability to enforce tax collection decreases. A recent IMF paper concludes that in 10 years of reforms Azerbaijan had made no progress and had even backtracked on electricity reform, a large source of potential tax revenues for the state. In fact, only one-third of electricity billing was actually collected in 2002. The continued subsidization in the natural gas sector is another source of lost revenues, which also distorts the domestic natural gas market and hinders investment in that sector. In Azerbaijan (and in Uzbekistan) actual gas tariffs are below wellhead extraction costs (even including transmission and distribution fees).[21] As Nigeria's economy minister said in an interview: "Oil has made us lazy", and it is possible this is already happening in Azerbaijan.[22]

Effects on Regime Longevity and Political Ideology

Oil revenue dependency, since it coincides so often with corruption, has an effect on the leadership of the country and that leadership's longevity. Oil revenues provide a new source of money that helps incumbent parties remain in power, and they give the leadership resources to silence opposition. Worries about Azerbaijan's management of oil revenues are worsened by the country's reputation for corruption. The same family—first Heydar Aliyev, a former Soviet-era KGB boss, and his son Ilham since 2003—has led Azerbaijan since its independence. Monopolies still dominate most of Azerbaijan's economy outside of the oil sector, and many are run by associates of the President. Likewise, large boosts in government spending could easily benefit Aliyev's network of associates if the spending is not held in check and if the proper accountability does not exist.

Azerbaijan's opposition parties have already attempted to voice their concern over government policies and election results. Some opposition parties have argued that the accumulation of the oil revenues in SOFAZ and their investment into foreign low-interest bonds and stock is not as productive as would have been their investment into the domestic market. A good example of this problem has been the lack of loans for farmers and for small businesses. They question the government's need to borrow money from foreign banks and financial institutions at higher interest rates when they could use the oil revenues for the same purpose. Based on the arguments about Dutch Disease, one reason this is occurring is the desire to exercise restraint on expenditure levels. But at least on one occasion, government representatives, such as State Economic Advisor Vahid Akhundov, have agreed with this concern.[23]

Research by Hoff, Horowitz, and Milanovic shows that ideological change (or "alternation" as they call it) has positive effects on governance indicators, and thus positive effects in terms of economic growth potential.[24] Their main set of regression results show the extent to which six different indicators of governance are associated with five independent variables: income level, democracy, type of government in power, other control variables (such as war) and alternation of power. The latter is the most important because alternation is "the only way to break the vicious circle of weak institutions and strong particular interests." The addition of the independent variable "fuel exports as a share of GDP" shows that each percentage point increase in fuel dependency is associated with a .01 to .03 points decrease in rule of law, government effectiveness, regulatory quality, and voice and accountability.[25] One independent variable used in their regression is the presence of center-right dictatorship, such as Azerbaijan's. This indicator has a significant negative effect on three governance indicators in the regression without the fuel share variable. When including the fuel share variable, the dictatorship indicator is a significant predictor for all five measures of governance.

In terms of regime longevity, a recent journal article analyzed the experience of oil exporting countries from 1960-1999 and showed that oil wealth actually lessens the likelihood of regime failure.[26] Benjamin Smith constructs a model that includes variables for boom and bust cycles of the 1970s and 1980s, respectively, to account for the following plausibility: that these boom and bust cycles had an additional destabilizing effect on oil-revenue-dependent regimes (or on likelihood of civil war, explained below). His results show that oil wealth significantly decreases the likelihood of regime failure (contradicting the 'oils-as-spoils' argument), and that the disconcerting economic effects "do not seem to have had an effect on regime viability in either direction." Oil provides more than half the GDP of 19 of the 60 countries in Smith's sample, and based on his results, "these regimes face a lower risk of breakdown, confront fewer civil wars, and antistate protests than regimes in oil-poor states". Longevity, even through boom and bust cycles, is the dominant trend among oil exporters.[27]

All of this argues for the continued presence of the Aliev regime, lowering the potential for alternation, and consequently affecting regime quality.

Effects on Income Inequality and Nagorno-Karabakh

As a result of Azerbaijan's armed conflict with Armenia from 1988–1994, around 12 percent of Azerbaijan's 8.3 million people became refugees and internally displaced persons (IDPs). Income disparity among the regions is large: in Baku income is roughly 20-30 percent higher than in the western regions. While Baku and its environs have been the recipient of high levels of foreign direct investment (FDI) in recent years, the Western regions have the lowest levels of income and the highest incidence of poverty.[28]

GDP growth, managed properly, tends to reduce income inequality within a country (such as in India and Pakistan), but in other cases inequality has increased (such as in China, Indonesia, and Thailand). Based on empirical evidence, the speed of real GDP growth also seems to have a negative effect on inequality, even despite government policies seeking to avoid such an outcome.

Smith also includes a regression to estimate the effects of the boom and bust cycles on the possibility of civil war. Similar to his results with regime failure, the economic turbulence of the late 1970s and 1980s does not seem to have adversely affected the likelihood or the intensity of civil war in oil-rich states.[29]

In Azerbaijan, spending on the military has risen from \$135 million (2.7 percent of non-oil GDP) in 2001 to \$300 million (4 percent of non-oil GDP) by 2005.[30] After Armenian officials pledged to respond accordingly with the Azerbaijani increase, Baku promised to spend \$600 million on the military in 2006.[31] In contrast, Armenia will be challenged to spend equivalent amounts since it continues to be excluded from regional projects. Also, Azerbaijani officers trained in or by Turkey and the country's participation in conflicts in Iraq and Afghanistan have improved the military's battle readiness.[32]

Not only does mounting violence over Nagorno-Karabakh pose a concern due to its proximity to the route of the BTC and SCP pipelines, but it also poses a threat to internal and regional political stability. The alignment of BTC and SCP member countries—Azerbaijan, Georgia, and Turkey—has, "amplified the [Nagorno-Karabakh] conflict fault-line," in the region and soured attempts by Armenian businessmen to strengthen ties with Turkey.[33] The border between Armenia and Azerbaijan, as well as blockades between Georgia and Abkhazia and Georgia and South Ossetia, is both a contributor to and a result of continued conflict in the region.[34] With increasing oil revenues over the next several years, anti-Armenian factions in Baku could precipitate a non-diplomatic solution to the conflict. Over half a million IDPs living in Baku from Nagorno-Karabakh and the surrounding districts have become a strong-pro war voice, 84 percent of whom call for the use of force to resolve the conflict according to a 2004 poll.[35] On the other hand, the large expected windfall from these revenues has motivated the international community to act to solve the conflict at this time, and it is not in Azerbaijan's economic interest to choose a military solution.

There are a number of economic incentives for Azerbaijan and Armenia to come to an agreement on the conflict including improving the investment climate in the non-oil sectors and improving access to the Nakhichevan Autonomous republic. According to a 2001 World Bank study, a peace agreement would increase Azerbaijan's exports by about 11 percent of 1999 levels and raise its GDP by 5 percent. The continued presence of a black market in Sadakhlo on Georgian territory where, amongst other goods, bran and salt are sold into Armenia and Armenian smoked fish into Azerbaijan continues to affect the fiscal balance between the two countries. On the other hand, the lack of trade regulation on this market represents a loss of tax revenue for the government, but on the other hand a source of employment for the traders.[36]

Cautious Optimism

There are still many reasons to believe that Azerbaijan will join the ranks of Norway, rather than Nigeria in terms of management of its oil wealth. For one, as stated above, Azerbaijan is unique in that one of its assets is its access to energy markets from the construction of the BTC and SCP pipelines. Even after the hydrocarbon resources are depleted, the transport infrastructure will continue to provide a revenue source, albeit a smaller one, well into the 21st century.

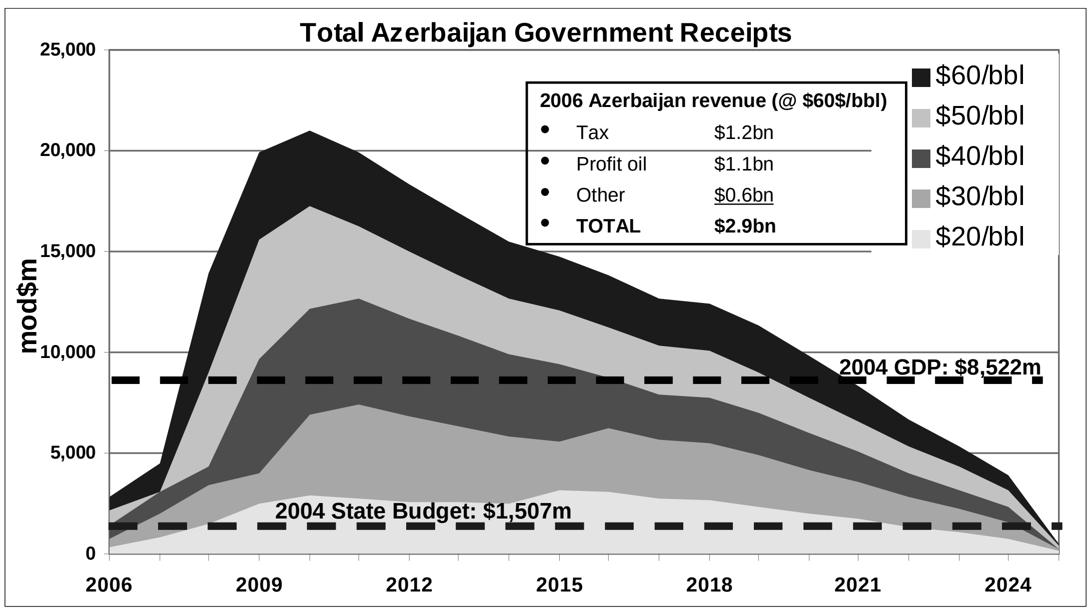
In the medium term, Azerbaijan's legal framework has been 'prepped' for increased foreign direct investment and will provide safeguards for foreign investors and a mechanism for proper arbitration. The oil fund and the PSA structures were established to prohibit excessive rent seeking. Abundant natural resources, especially in conjunction with poor institutions or imperfect markets and lax legal structures, could lead to a struggle for huge resource rents. In Azerbaijan the PSAs and the oil fund minimize the effect of this struggle to the budgetary formation process and the struggle between the Aliev administration and the parliament. Still, rent-seeking may be happening in covert forms. For example, governments may be able to placate their critics by providing social benefits to the population and constructing unneeded infrastructure. Indeed, in Azerbaijan this is occurring with highway construction, and the limited money transfers to the IDPs. The long-term effect of these practices is unknown since, admittedly, a limited amount of infrastructure construction and government aid ought to be happening anyway. And, it is not <u>yet</u> of a magnitude (based on the budget for 2005) to raise the ire of economists at international financial institutions.

Inflows of FDI into the oil sector will have beneficial spillover effects in the non-oil sector as long as Azerbaijan is able to manage monetary and fiscal fluctuations associated with increases in oil export revenues. Outside of the large ACG field, Azerbaijan has signed over 20 major field agreements with approximately 30 companies from 15 countries, and the new pipelines' development has helped build the economic relationship with Georgia and Turkey.

Finally, SOCAR stands to benefit from the expertise of international oil companies (IOCs) now actively engaged in extracting oil from the ACG field. As a shareholder in the BTC company, the company has already been involved in the planning and construction process of the pipeline. As a 10 percent shareholder in the consortium which is developing the ACG field, SOCAR also stands to gain access to expertise in production technology from other IOCs. Some of its older oil fields are losing reservoir pressure and equipment is in disrepair, so with the right technology and infrastructure SOCAR could prolong the life of these fields. Even after the revenue from oil and gas development falls off (possibly around 2010-2012), Azerbaijan will still stand to gain from transit revenues from the BTC pipeline.

Azerbaijan's economy is extremely dependent on the fuel sector for its long-term well-being. The government's initiatives to prepare for mass inflows of oil revenues could help it avoid Dutch Disease and its associated effects. But as the country becomes less and less dependent on foreign oil companies and IMF loans, there will be fewer "strings attached" and less incentive for reform in the future. The economic literature shows that increased oil revenues have a stabilizing effect on a country's leadership and government, but a concurrent downturn in the quality of that government. Also, oil revenues' negative effect on income equality will indirectly dampen export-led growth. Azerbaijan is getting its first taste of the oil revenues to which it is entitled, but no one foresaw the magnitude. If the Aliev regime is being honest about its intent to continue progress on institutional and economic reform, then existing reforms already completed or underway, along with efforts to enhance the non-oil sector, will aid Azerbaijan in effectively managing its next transition.

Appendix 1



Forecast State Revenues from ACG, BTC and SD Stage 1/SCP
~$40bn at $20/bbl ~$140bn at $40/bbl ~$230bn at $60/bbl
….including profit oil, tax, bonuses, SOCAR

Source: BP. Michael Townshend. Presentation at SAIS. February 2006.

Endnotes

[1] IMF, 05/19.

[2] www.freedomhouse.org.

[3] Corruptions Perceptions Index, 2005. Transparency International. Available online at http://www.transparency.org/policy_research/surveys_indices/cpi/2005.

[4] Dutch Disease occurs when large inflows of oil revenues appreciates a country's exchange rate, causing a loss of competitiveness in the non-oil sector, and making economic policy management even more difficult.

[5] "Caspian Sea Region Brief: Summary Tables." US Dpt. of Energy/EIA. Accessible online at http://www.eia.doe.gov/emeu/cabs/Caspian/SummaryTables.html.

[6] IMF Country Report No. 05/19. "Azerbaijan Republic: 2004 Article IV Consultation, Fourth Review under PRGF." And "GDP in Azerbaijan up 26.4% in 2005". *Interfax: Banking & Finance.* 27 January 2006.

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[9] Wakemann-Linn, Jonathan, Paul Mathieu, and Bert van Selm. "Oil Funds in Transition Economies." In Fiscal Policy Formulation and Implementation in Oil Producing Countries." Eds. J.M. Davis, R. Ossokowski, and A. Fedelino. IMF: 2003. Page 350.

[10] Ibid.

[11] Wakemann-Linn, Jonathan, Paul Mathieu, and Bert van Selm. "Oil Funds in Transition Economies: Revenue Management." Presentation. October 16, 2002.

[12] Wakemann-Linn, *et al.* "Managing Oil Wealth: The Case of Azerbaijan." IMF: 2004, page 11.

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[17] Isham, Joshua, Lant Pritchett, Michael Woolcock, and Gwen Busby. "The Varieties of Resource Experience: How Natural Resource Export Structures Affect the Political Economy of Economic Growth" Middlebury College Economics Discussion Paper No. 03-08R. June 2004. Accessed online at http://www.middlebury.edu/services/econ/repec/mdl/ancoec/0308R.pdf.

[18] Isham, Joshua, *et al.* 23.

[19] In contrast to oil exploitation in other CIS countries, which have limited the participation of foreign actors in their oil industry, the case of Azerbaijan presents a slight exception to the "point-source" classification that the paper presents. In Azerbaijan, the oil revenues are contingent upon a number of different factors: the safe and swift export of oil to the market from the Turkish port of Ceyhan, and the continued economic viability of transport via the Baku-T'bilisi Ceyhan pipeline. In fact, the resources in the Caspian had very little economic value until it was determined there would be a viable export route. In that case, the "point-source" export is actually the availability of transit itself; access to markets is non-substitutable.

[20] Esanov, Akram, Martin Raiser, and Willem Buiter. "Nature's blessing or nature's curse: The political economy of transition in resource-based economies." EBRD. London, UK. November 2001.

[21]Saavalainen, Tapio and Joy ten Berge. "Quasi-Fiscal Deficits and Energy Conditionality in Selected CIS Countries". IMF. February 2006. WP/06/43.

[22] Gylfason, 226.

[23] Cornell, Svante E. and Fariz Ismailzade. "The BTC Pipeline: Implications for Azerbaijan." In The BTC Pipeline: Oil Window to the West. Eds Frederick Starr and Svante Cornell. SAIS: Washington, DC. Page 12.

[24] See Karla Hoff, Shale Horowitz, and Branko Milanovic. "Investment in Influence and Political Alternation: Evidence from Transition Countries". June 2004. Available at http://www.london.edu/cnem/Events/CNEM_Conference/cnem_conference.html.

[25] Ibid, p. 34.

[26] Smith, Benjamin. "Oil Wealth and Regime Survival in the Developing World, 1960-1999". American Journal of Political Science. April 2004, pp. 232-246.

[27] Although outside of the scope of this paper, the last year given for his dataset is 1999, begging the question of recent empirical evidence of the oil-as-spoils argument in action in Iraq and Nigeria. He codes for a regional dummy variable, and for sub-saharan Africa it exerts a significant negative effect on the likelihood of civil war. This suggests that most of these states are poorly represented by a few select states in which civil war is simply endemic.

[28] IMF Country Report No. 05/17. "Azerbaijan Republic: Selected Issues". January 2005.

[29] Smith, 240.

[30] IMF Country Report. PRGF. August 2005. Table 5, page 26.

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[33] Champain, Phil. "The cost of stalemate." 2005.

[34] BBC Monitoring Caucasus. "Azeri leader blasts Armenia, praises domestic policies in address to diaspora." As reported on Azerbaijani TV Channel One, Baku, in Azeri. 16 March 2006.

[35] Freizer. "A Last Chance for Peace".

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